

NOAA, NATIONAL WEATHER SERVICE, WEATHER FORECAST OFFICE

Miami, Florida 33165

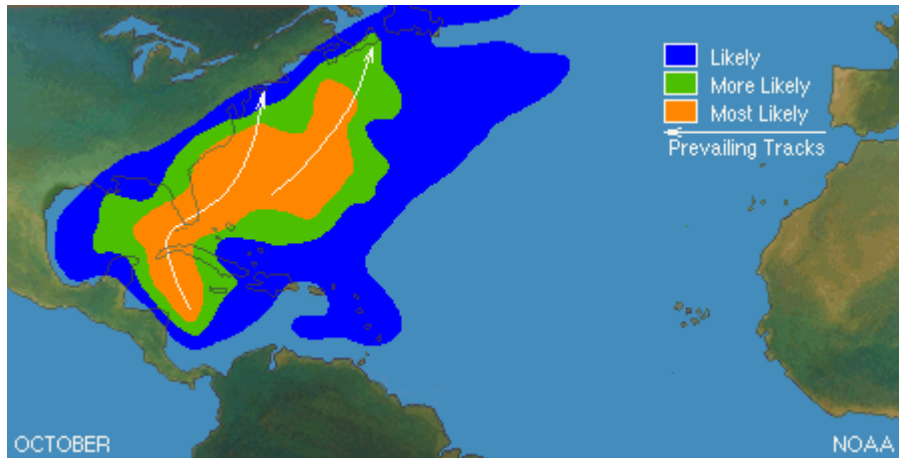
Tropical Storm/Hurricane Climatology

Mainland South Florida - October

Although overall tropical activity typically begins to quiet down in the Atlantic Basin during the month of October, south Florida is still prone to a tropical cyclone strike. In fact, since 1851 more hurricanes have struck the south Florida mainland in October than in any other month of the season. A total of 19 hurricanes have impacted the south Florida mainland in October, compared to 15 in September. A total of 30 tropical cyclones (tropical storms and hurricanes) have affected mainland south Florida, also the most of any month. Although the number of hurricanes peak in October, the number of major hurricanes (Category 3 or greater) which have impacted the area is less than in September. Since 1851, a total of 7 major hurricanes have affected the area, ranking behind September which has had 11 major hurricanes.

Another change from September to October is the origin and tracks of tropical cyclones. In September, most of the tropical cyclones which have impacted the area originated in the tropical Atlantic between Africa and the Lesser Antilles and moving west northwest into our region. However, in October tropical cyclones tend to form in the western

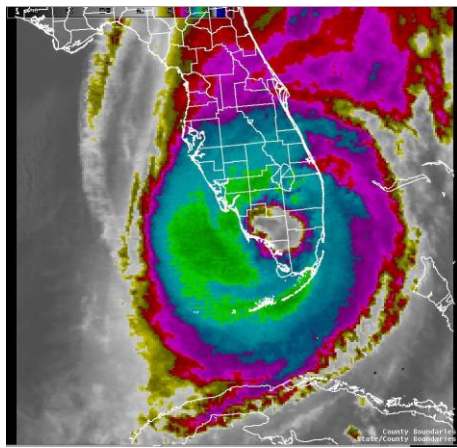
Caribbean Sea with tracks towards the north or northeast into the local area.



Here are a few brief summaries of some notable hurricanes which have impacted south Florida during the month of October:

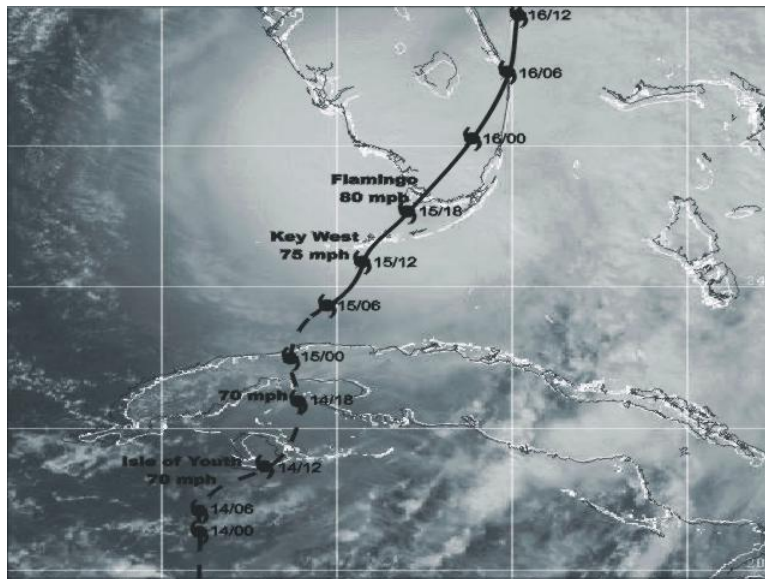
October 24, 2005 – Hurricane Wilma

The most recent hurricane to impact South Florida was Hurricane Wilma on October 24, 2005. Wilma was a classic south Florida October hurricane, making landfall on the Gulf coast between Everglades City and Cape Romano shortly before 7 AM on the morning of October 24th as a major Category 3 hurricane. The hurricane quickly tracked northeast across south Florida at around 25 mph exiting the Palm Beach County coast between 11 AM and noon.



Wilma exhibited a large 55-65 mile wide eye while crossing the state, resulting in a large wind field. This produced widespread wind damage across the area with large trees and power lines downed resulting in power outages to over 3 million customers. Structural damage was greatest in Palm Beach and Broward Counties, though high rise buildings region-wide had damage, mainly in the form of broken windows. Follow this link for more detailed information on Hurricane Wilma: <http://www.srh.noaa.gov/mfl/?n=wilma>.

October 15, 1999 – Hurricane Irene

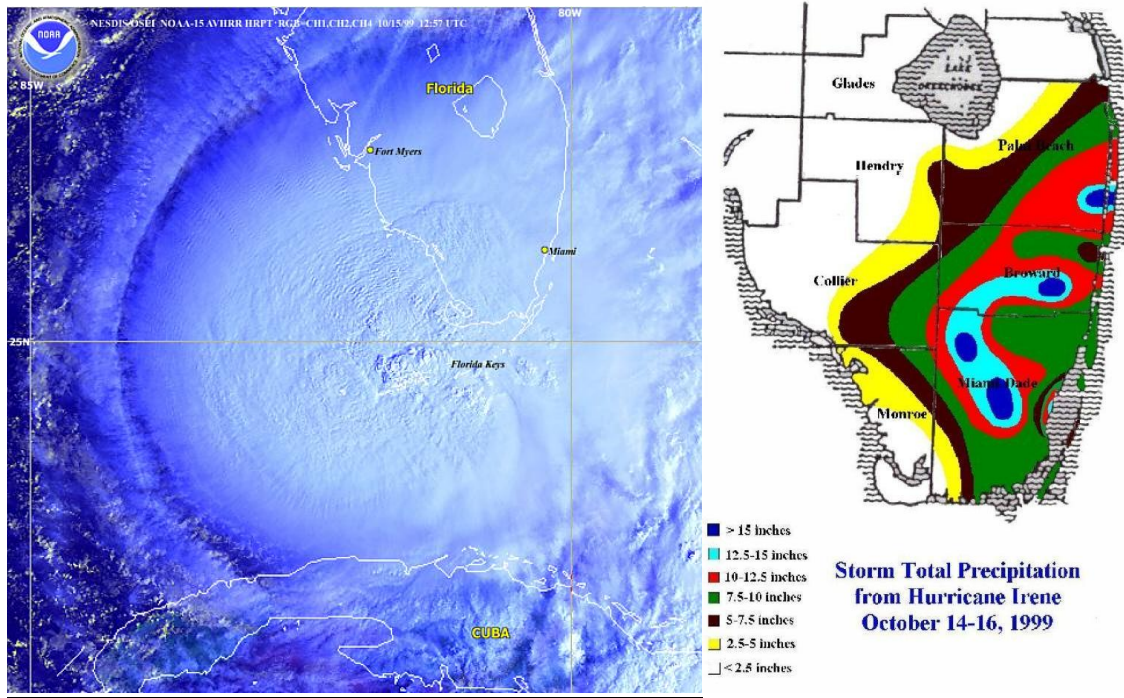


Another typical October storm, Hurricane Irene formed in the western Caribbean Sea, moved north northeast over western Cuba, then over Key West and onshore the Florida peninsula at Cape Sable during the afternoon of October 15th, 1999. Irene then tracked northeast and exited the Atlantic coast near Jupiter early on the 16th.

Irene made landfall as a Category 1 hurricane with maximum sustained winds of 80 mph. Despite its official designation as a hurricane, sustained winds across mainland South Florida were mainly in the 40 to 60 mph range, with gusts to near hurricane force. The sustained

hurricane force winds were confined to an area off the southeast Florida coast. Wind was not the major impact associated with Irene; rather it was the excessive rainfall which resulted in widespread major flooding across Southeast Florida. Many locales received over 10 inches of rain with a maximum amount of 17.45 inches at Boynton Beach. Three people drowned when driving vehicles into canals which had overtopped their banks as a result of the extremely heavy rains. Another five people died of electrocution from touching downed power lines.

Below is a satellite image of Hurricane Irene along with the total rainfall which occurred from this system. Irene is a classic example of how even a borderline hurricane can produce major impacts.

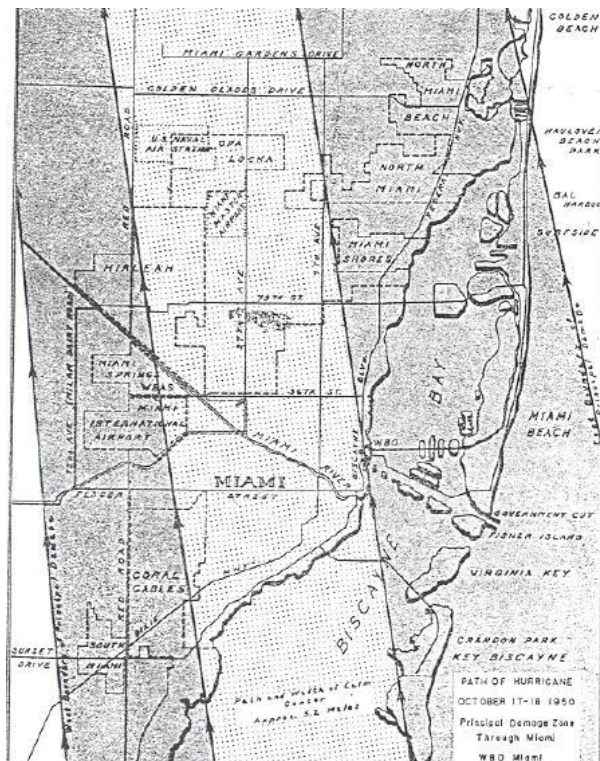


Follow this link for more detailed information on Hurricane Irene:

<http://www.nhc.noaa.gov/1999irene.html>

October 17, 1950 – Hurricane King

Hurricane King developed over the western Caribbean Sea, tracked northeast across central Cuba, then turned north-northwest, making landfall at Miami just before midnight on October 17, 1950 as a major Category 3 hurricane. King was a small, compact hurricane with a narrow but intense damage path estimated to be approximately 7 to 14 miles wide. Winds along the path were estimated to be 120 mph with gusts up to 150 mph.



The map above depicts the narrow damage path across Miami-Dade County. The white areas indicate areas of extensive damage associated with the small eye wall of King. The swath of extreme damage was so narrow that it was believed to have been caused by tornadoes instead of the intense eye wall winds.

Follow this link for more detailed information on Hurricane King (pages 13-15):

<http://www.aoml.noaa.gov/general/lib/lib1/nhclib/mwreviews/1950.pdf>